

WHAT IS CLAIMED IS:

1. A process for providing a loan secured by real property comprising the steps of:

issuing a lump sum loan amount to an individual with an interest in real property, the loan secured by the real property of the individual and having a principal amount, an interest amount and a payoff amount where the individual does not make any installment payment toward repayment of the principal amount or towards repayment of the interest amount accrued until a termination date of the loan; and

receiving a payment corresponding to the payoff amount of the loan on the termination date of the loan, the payoff amount being equal to the principal amount and the interest amount accrued during a term of the loan, and where the interest amount accrued is calculated based on a repayment schedule having at least one repayment calculation component.

2. The process according to claim 1, wherein the termination date of the loan is based on a date of the death of the individual.

15 3. The process according to claim 1, wherein the termination date of the loan is based on a date when the real property is sold by the individual.

4. The process according to claim 1, wherein the repayment schedule comprises a plurality of calculation components.

5. The process according to claim 1, wherein the repayment schedule comprises 20 three repayment calculation components comprising:

- a) a simple interest repayment calculation component;
- b) a no additional interest repayment calculation component; and
- c) a compound interest repayment calculation component.

6. The process according to claim 1, further comprising the step of issuing a second lump sum loan to the individual using the real property as security for the second lump sum loan, wherein an amount of the second lump sum loan is based on an increase in a value of the real property.

5 7. The process according to claim 1, wherein the repayment schedule is based on a plurality of standard actuarial tables and a life expectancy of the individual.

8. A process for providing a loan secured by an asset comprising the steps of:

issuing a lump sum loan amount to an owner of an asset, the loan secured by the asset of the owner and having a principal amount, an interest amount and a payoff amount where the owner does not make an installment payment toward repayment of the principal amount towards repayment of the interest amount accrued until a termination date of the loan; and

receiving a payment corresponding to the payoff amount of the loan on the termination date of the loan, the payoff amount being equal to the principal amount and the interest amount accrued during a term of the loan, and where the interest amount accrued is calculated based on a repayment schedule having a plurality of repayment calculation components.

9. The process according to claim 8, wherein the termination date of the loan is based on a date of the death of the owner.

20 10. The process according to claim 8, wherein the termination date of the loan is based on the date when the asset is sold by the owner.

11. The process according to claim 8, wherein the repayment schedule comprises three repayment calculation components comprising:

a) a simple interest loan repayment calculation component;

25 b) a no additional interest repayment calculation component; and

c) a component interest repayment calculation component.

12. The process according to claim 8, further comprising the step of issuing a second lump sum loan to the owner using the asset as security for the second lump sum loan, wherein an amount of the second lump sum loan is based on an increase in the value of the asset.

5 13. The process according to claim 8, wherein the repayment schedule is based on a plurality of standard actuarial tables and a life expectancy of the owners.

14. A system for providing a loan secured by real property, the loan having a principal amount, an interest amount and a payoff amount, the system comprising:

10 at least one borrower receiving at least one lump sum loan amount, where the loan is secured by the real property of the at least one borrower, and the at least one borrower does not make any installment payment toward repayment of the principal amount, or toward repayment of the interest amount accrued until a termination date of the loan; and

15 at least one lender component issuing the at least one lump sum loan amount and receiving a payment corresponding to the payoff amount of the loan on the termination date of the loan, the payoff amount being equal to the principal amount and the interest amount accrued during a term of the loan, and wherein the amount accrued is calculated based on a repayment schedule having at least one repayment calculation component.

20 15. The system according to claim 14, where the termination date of the loan is based on a date of the death of the owner.

16. The system according to claim 14, where the termination date of the loan is based on a date when the real property is sold by the borrower.

25 17. The system according to claim 14, where the repayment schedule comprises a plurality of repayment calculation components.

18. The system according to claim 14, where the repayment schedule comprises three repayment calculation components comprising:

- a) a simple interest repayment calculation component;
- b) a no additional interest repayment calculation component; and
- c) a compound interest repayment calculation component.

19. A system for providing a loan secured by an asset, the loan having a principal  
5 amount, an interest amount, and a payoff amount, the system comprising:

at least one borrower receiving at least one lump sum loan amount, where the loan is secured by the asset of the at least one borrower, and the at least one borrower does not make any installment payment toward repayment of the principal amount or toward repayment of the interest amount accrued until a termination date of the loan;

10 and

at least one lender component issuing the at least one lump sum loan amount and receiving a payment corresponding to the payoff amount of the loan on the termination date of the loan, the payoff amount being equal to the principal amount and the interest amount accrued during a term of the loan, and wherein the amount accrued is calculated based on a repayment schedule having a plurality of repayment calculation components.

15 20. The system according to claim 14, where the termination date of the loan occurs on a date of the death of the owner.

21. The system according to claim 14, where the termination date of the loan  
20 occurs on a date when the real property is sold by the borrower.

22. The system according to claim 14, where the repayment schedule comprises three repayment calculation components comprising:

- a) a simple interest repayment calculation component;
- b) a no additional interest repayment calculation component; and

25 a compound interest repayment calculation component.

23. A system for securitizing a loan having a principal amount, an interest amount and a payoff amount, the system comprising:

a lender component for issuing at least one loan secured by real property to a borrower, wherein:

5 a) no installment payment towards repayment of the principal amount or toward repayment of the interest amount accrued is required until a termination date of the at least one loan;

b) the payoff amount is equal to the principal amount and the interest amount accrued during a term of the at least one loan; and

10 c) the interest amount accrued during the term of the loan is calculated based on a repayment schedule having a plurality of repayment calculation components; and

a securitization component for issuing at least one securitized note based on the at least one loan.

15 24. The system according to claim 23, where the at least one securitized note is issued based on actuarial computations involving the mortality of the borrower.

25. The system according to claim 23, where the lender component issues an incremental addition to the at least one loan and an increase in the value of the real property secures the incremental addition to the at least one loan.

20 26. The system according to claim 25, where the securitization component issues at least one additional securitized note based on the incremental addition to the at least one loan.

27. A process for securitizing a loan having a principal amount, an interest amount and a payoff amount, the process comprising:

25 issuing at least one loan to a borrower where:

a) the at least one loan is secured by real property;  
b) no installment payment toward repayment of the principal amount or toward repayment of the interest amount accrued is required until a termination date of the at least one loan; and

5                   c) the amount accrued during the term of the loan is calculated based on a repayment schedule having a plurality of repayment calculation components; and  
issuing at least one securitized note based on the at least one loan.

28.       The process according to claim 27, where the at least one securitized note is issued based on actuarial computations involving the mortality of the borrower.

10      29.       The process according to claim 27, further comprising the step of issuing an incremental addition to the at least one loan, where an increase in the value of the real property secures the incremental addition to the at least one loan.

15      30.       The process according to claim 29, further comprising the step of issuing at least one additional securitized note based on the incremental addition to the at least one loan.

31.       A process for optimizing an expected return structure on a loan and at least one securitized note based on the loan, the loan having a principal amount, an interest amount, and payoff amount, the process comprising:

20       receiving borrower information, where the borrower information comprises information related to a borrower receiving the loan;

          receiving optimization constraints, where the solver constraints comprise information related to mathematical calculations of the expected return structure;

          receiving solver constraints, where the solver constraints comprise information to mathematical calculations of the expected return structure; and

generating the expected return structure based in part on the borrower information, the optimization constraints and the solver constraints.

32. The process according to claim 31, further comprising the step of issuing the loan to the borrower, where the loan is based on the expected return structure.

5 33. The process according to claim 31, where the step of generating the expected return structure is further based on the actuarial computations, including mortality vectors, based on the borrower information.

34. The process according to claim 31, where the optimization constraints further comprise at least one of:

10 a) loss thresholds;  
b) cashflow requirements;  
c) return on equity;  
d) return on investment;  
e) return on capital; and  
15 f) expectations of further real estate prices.

35. The process according to claim 31, where the loan is secured by real property.

36. The processing according to claim 32, further comprising the step of issuing at least one securitized note based on the loan.

37. The process according to claim 32, where:

20 a) no installment payments toward repayment of the principal amount or toward repayment of the interest amount accrued is required until a termination date of the loan;  
b) the payoff amount is equal to the principal amount and the interest amount accrued during a term of the loan; and

c) the interest amount accrued during the term of the loan is calculated based on a repayment schedule having a plurality of repayment calculation components.

38. The process according to claim 37, further comprising the step of issuing at 5 least one securitized note based on the loan.

39. The process according to claim 31, where the solver constraints further comprise at least one of:

- a) a maximum time for calculating the expected return structure;
- b) a number of iterations to be performed;
- 10 c) a precision level;
- d) a tolerance level;
- e) a convergent level;
- f) a tangential estimate;
- 15 g) a quadratic estimate;
- h) a designation to use either a forward derivative or a central derivative;
- i) a designation to use either a Newton search or a conjugate search;
- j) automatic scaling; and
- k) an assumption regarding a linear model.

40. A system for optimizing an expected return structure on a loan and at least one 20 securitized note based on the loan, the loan having a principal amount, an interest amount and a payoff amount, the system comprising:

a receiver module for receiving:

- a) borrower information related to a borrower receiving the loan;

b) optimization constraints comprising information related to the expected return structure; and

c) receiving solver constraints comprising information relate to the mathematical calculations for arriving at the expected return structure; and

5 a processor module for generating the expected return structure based in part on the borrower information, the optimization constraints and the solver constraints.

41. The system according to claim 40, further comprising a lender component for issuing the loan to the borrower, where the loan is based on the expected return schedule.

10 42. The system according to claim 40, where the step of generating the expected return structure is further based on the actuarial computations, including mortality vectors, based on the borrower information.

43. The system according to claim 40, where the loan is secured by real property.

15 44. The system according to claim 40, where optimization constraints further comprise at least one of:

- a) loss thresholds;
- b) cashflow requirements;
- c) return on equity;
- d) return on investments;

20 e) return on capital; and

- f) expectations of further real estate prices.

45. The system according to claim 41, wherein:

- a) no installment payment toward repayments of the principal amount or toward repayment of the interest amount accrued is required until a termination date of the loan;
- b) the payoff amount is equal to the principal amount and the interest amount accrued during a term of the loan; and
- c) the interest amount accrued during the term of the loan is calculated based on a repayment schedule having a plurality of repayment calculation components.

46. The system according to claim 45, further comprising a securitization

10 component for issuing at least one securitized note based on the loan.

47. The system according to claim 41, further comprising a securitization component for issuing at least one securitization note based on the loan.

48. The system according to claim 40, where the solver constraints further comprise at least one of:

- a) a maximum time for calculating the expected return structure;
- b) a number of iterations to be performed;
- c) a precision level;
- d) a tolerance level;
- e) a convergent level;
- f) a tangential estimate;
- g) a quadratic estimate;
- h) a designation to use either a forward derivative or a central derivative;
- i) a designation to use either a Newton search or a conjugate search;

- j) automatic scaling; and
- k) an assumption regarding a linear model.